

## CLAIMS

What is claimed is:

- 1 1. A method of tuning an application deployed in an application server,  
2 comprising the steps of:  
3       deploying the application in the application server;  
4       invoking an application tuning server-side component operable to retrieve  
5 information relating to application parameters to be tuned;  
6       receiving specifications of values of application tuning parameters; and  
7       tuning the application using the received specified parameter values.
  
- 1 2. The method of claim 1, wherein the step of invoking the application  
2 tuning server-side component is performed in response to an action by an  
3 administrator, engineer, or user of the application server.
  
- 1 3. The method of claim 3, wherein the information relating to application  
2 parameters to be tuned comprises:  
3       current values of application parameters and measurements of  
4 performance of the application.

1 4. The method of claim 3, wherein the application tuning server-side  
2 component is operable to accept input from the administrator, engineer, or user to  
3 specify values of the application parameters.

1 5. The method of claim 4, wherein the values of application parameters  
2 comprise at least one of:

3 Database Connection Pool size, Thread Pool Size, HTTP connection  
4 pool size, HTTP incoming connection queue length, HTTP Socket timeout,  
5 Session pool size, and Java Virtual Machine tuning parameters.

1 6. The method of claim 5, wherein the measurements of performance of the  
2 application comprise at least one of:

3 Overall transactions per second, Average Request Time, HTTP  
4 transactions per second, Database connections used, HTTP connections used,  
5 Active thread count, Overall throughput, Database throughput, HTTP  
6 throughput.

1 7. The method of claim 6, wherein the application tuning server-side  
2 component is implemented using Java Management Extensions.

- 1    8.    A system for tuning an application deployed in an application server  
2    comprising:  
3            a processor operable to execute computer program instructions;  
4            a memory operable to store computer program instructions executable  
5    by the processor; and  
6            computer program instructions stored in the memory and executable to  
7    perform the steps of:  
8            deploying the application in the application server;  
9            invoking an application tuning server-side component operable to retrieve  
10   information relating to application parameters to be tuned;  
11            receiving specifications of values of application tuning parameters; and  
12            tuning the application using the received specified parameter values.
- 1    9.    The system of claim 8, wherein the step of invoking the application tuning  
2    server-side component is performed in response to an action by an administrator,  
3    engineer, or user of the application server.

1 10. The system of claim 9, wherein the information relating to application  
2 parameters to be tuned comprises:

3 current values of application parameters and measurements of  
4 performance of the application.

1 11. The system of claim 10, wherein the application tuning server-side  
2 component is operable to accept input from the administrator, engineer, or user to  
3 specify values of the application parameters.

1 12. The system of claim 11, wherein the values of application parameters  
2 comprise at least one of:

3 Database Connection Pool size, Thread Pool Size, HTTP connection  
4 pool size, HTTP incoming connection queue length, HTTP Socket timeout,  
5 Session pool size, and Java Virtual Machine tuning parameters.

1 13. The system of claim 12, wherein the measurements of performance of the  
2 application comprise at least one of:

3 Overall transactions per second, Average Request Time, HTTP  
4 transactions per second, Database connections used, HTTP connections used,

5 Active thread count, Overall throughput, Database throughput, HTTP  
6 throughput.

1 14. The system of claim 13, wherein the application tuning server-side  
2 component is implemented using Java Management Extensions.

1 15. A computer program product for tuning an application deployed in an  
2 application server comprising:  
3 a computer readable medium;  
4 computer program instructions, recorded on the computer readable  
5 medium, executable by a processor, for performing the steps of  
6 deploying the application in the application server;  
7 invoking an application tuning server-side component operable to retrieve  
8 information relating to application parameters to be tuned;  
9 receiving specifications of values of application tuning parameters; and  
10 tuning the application using the received specified parameter values.

1 16. The computer program product of claim 15, wherein the step of invoking  
2 the application tuning server-side component is performed in response to an  
3 action by an administrator, engineer, or user of the application server.

1 17. The computer program product of claim 16, wherein the information  
2 relating to application parameters to be tuned comprises:  
3 current values of application parameters and measurements of  
4 performance of the application.

1 18. The computer program product of claim 17, wherein the application  
2 tuning server-side component is operable to accept input from the administrator,  
3 engineer, or user to specify values of the application parameters.

1 19. The computer program product of claim 18, wherein the values of  
2 application parameters comprise at least one of:

3 Database Connection Pool size, Thread Pool Size, HTTP connection  
4 pool size, HTTP incoming connection queue length, HTTP Socket timeout,  
5 Session pool size, and Java Virtual Machine tuning parameters.

1 20. The computer program product of claim 19, wherein the measurements of  
2 performance of the application comprise at least one of:

3 Overall transactions per second, Average Request Time, HTTP  
4 transactions per second, Database connections used, HTTP connections used,  
5 Active thread count, Overall throughput, Database throughput, HTTP  
6 throughput.

1 21. The computer program product of claim 20, wherein the application  
2 tuning server-side component is implemented using Java Management  
3 Extensions.

1 22. An application tuning server-side component operable to tune an  
2 application deployed in an application server by performing the steps of:

3 retrieving information relating to application parameters to be tuned;  
4 receiving specifications of values of application tuning parameters; and  
5 tuning the application using the received specified parameter values.

1 23. The application tuning server-side component of claim 22, wherein the  
2 application tuning server-side component is invoked in response to an action by  
3 an administrator, engineer, or user of the application server.

1 24. The application tuning server-side component of claim 23, wherein the  
2 information relating to application parameters to be tuned comprises:  
3 current values of application parameters and measurements of  
4 performance of the application.

1 25. The application tuning server-side component of claim 24, wherein the  
2 application tuning server-side component is operable to accept input from the  
3 administrator, engineer, or user to specify values of the application parameters.

1 26. The application tuning server-side component of claim 25, wherein the  
2 application tuning server-side component is implemented using Java  
3 Management Extensions.

1 27. The application tuning server-side component of claim 26, wherein the  
2 values of application parameters comprise at least one of:



3           Database Connection Pool size, Thread Pool Size, HTTP connection pool  
4 size, HTTP incoming connection queue length, HTTP Socket timeout, Session  
5 pool size, and Java Virtual Machine tuning parameters.

1   28.   The application tuning server-side component of claim 27, wherein the  
2 measurements of performance of the application comprise at least one of:

3           Overall transactions per second, Average Request Time, HTTP  
4 transactions per second, Database connections used, HTTP connections used,  
5 Active thread count, Overall throughput, Database throughput, HTTP  
6 throughput.